

Mark - 1 Kit

Mark - 1 Kit contains two autoinjectors.

Tube #1 Atropine (Atropen)

Tube #2 Pralidoxime (2-PAM chloride)

Atropine (Tube #1)

Trade name: Atropen (Tube#1)

Class: Parasympatholytic/anticholinergic

Mechanism of action: Muscarinic antagonist

Indications: Organophosphate and nerve agent poisonings

Contraindications: Hypersensitivity, none in life threatening mass casualty incident.

Side effects: Blurred vision, dilated pupils, dry mouth, tachycardia and drowsiness

Dosage:

Adult: one autoinjector (Green label/2.0 mg)

Child (15-40 lbs): one autoinjector (Blue label / 0.5 mg)

Child (40-90 lbs): one autoinjector (Red label / 1.0 mg)

How supplied: Autoinjector

Mark - 1 Kit

Mark - 1 Kit contains two autoinjectors.

Tube #1 Atropine (Atropen)

Tube #2 Pralidoxime (2-PAM chloride)

Pralidoxime (Tube #2) (pra-li-DOX-eem)

Trade name: 2-PAM, Protopam Chloride

Class: cholinesterase reactivator

Mechanism of action: reactivates cholinesterase which has been inactivated by the organophosphate or related agents

Indications: Organophosphate and nerve agent poisonings (8.3, 8.3P, 8.4)

Contraindications: Hypersensitivity

Side effects: Blurred vision, dizziness, diplopia (double vision), headache, tachycardia, mild weakness and nausea

Interactions: Caution with barbituates. Barbiturates are potentiated by anticholinesterase. Barbiturates are potentiated by anticholinesterase.

Dosage: Remember 2PAM is Tube# 2 in a two-drug process.

Adult: 2-PAM autoinjector

Adult: Pralidoxime: 1-2 gram IV over 30–60 min

Maintenance infusion: Up to 500 mg per hour (max. of 12 gm/day)

If Mark-1 Kits are unavailable or IV access has been obtained:

Pediatric: Pralidoxime 25 - 50 mg/kg/doses IV/IO (maximum dose 1 g) or IM (maximum dose of 2 g), may repeat within 30-60 min as needed, then again every hour for 1 – 2 doses as needed.

How supplied: autoinjector

Ipratropium bromide (i-pra-TROE-pee-um)

Trade name: Atrovent

Class: Parasympatholytic bronchodilator

Mechanism of action: Anticholinergic agent, chemically related to atropine

Indications: Bronchospasm (asthma, chronic bronchitis, emphysema, reactive airway disease)

Contraindications: Hypersensitivity to atropine

Side Effects: Blurred vision, drying of bronchial secretions, head ache

Dosage:

Adult: Aerosol 0.5mg with albuterol 2.5mg, mixed in 3ml NS, via nebulizer x 1.

Pediatric: Aerosol 0.25mg (1.25ml of 0.02% solution) with albuterol 2.5mg 0.5ml of 0.5% solution), mixed in 3ml NS, via nebulizer x 1

How supplied: 0.5mg/3ml prefilled "bullets", multi-dose 0.02% solution vials.

Levalbuterol (lev-al-BYOO-ter-ol)

Trade name: Xopenex, Xopenex Pediatric

Class: Beta 2 agonist

Mechanism of action: Stimulate adenylyl cyclase from ATP, causing relaxation of the smooth muscles of the bronchial tree.

Indications: Bronchospasm (asthma, chronic bronchitis, emphysema, reactive airway disease)

Contraindications: Hypersensitivity to albuterol

Side Effects: Tachycardia, headaches, nausea, dizziness, anxiety.

Interactions: Antidepressant drugs classified as Monoamine oxidase (MAO) inhibitors or tricyclics, Beta blockers, Digoxin or Diuretics

Dosage:

Adult: 1.25 mg via nebulizer.

Pediatric: 0.63 mg via nebulizer.

How supplied: 0.63 mg/3ml vials

Metoclopramide (met oh kloe pra' mide)

Trade name: Clopra, Emex, Maxeran, Maxolon, Octamide, Pramin, Reglan

Class: Antiemetic

Mechanism of action: Dopamine receptor antagonist, exact mechanism not clear, but appears to sensitize GI smooth muscle to effects of acetylcholine by direct action.

Indications: Severe nausea and vomiting

Contraindications: Hypersensitivity, allergy to sulfite agents, Hx of seizure, extrapyramidal symptoms*, pheochromocytoma**, GI Obstruction or perforation, Hx of breast CA. Use caution with CHF, Hypokalemia; renal dysfunction, GI hemorrhage,

Side effects: Restlessness, drowsiness, fatigue

Interactions: Alcohol and other CNS depressants add to sedative effects. Anticholinergics and opiates analgesics may antagonize effect on GI motility. Phenthiazines may potentiate extrapyramidal symptoms. Hypertension may occur when metoclopramide is administered to patients taking MAO inhibitors

Dosage: Metoclopramide 0.1mg/kg IV / IM to max of 5 mg.

How supplied: 5 mg/ml

*Extrapyramidal symptoms: Akinesia (lack of movement, Parkinson-like)
Dystonic Reaction (muscle spasms of face, neck, back)
Dyskinesia (Blinking or twitches)
Akathisia (Inability to sit still, inner restlessness)

**Pheochromocytoma: tumor of the adrenal glands.

Norepinephrine

Trade name: Levophed

Class: sympathomimetic

Mechanism of action: alpha agonist, vasoconstriction & cardiac stimulation

Indications: Cardiac arrest; post resuscitation with hypotension

Contraindications: Hypersensitivity, normotensive or hypertension

Side effects: Anxiety, trembling, headache, dizziness, nausea & vomiting

Adult Dose: 1 - 30 mcg/min infusion

Pediatric Dose: 0.1 mcg/kg/min titrated to desired effect. Max 1- 2 mcg/kg/min.

How supplied: dilution to make 4mcg/ml (1mg in 250ml D5W)

Phenylephrine (fen-ill-EF-rin)

Trade name: Neo-Synephrine

Class: Sympathomimetic

Mechanism of action: Stimulates alpha-adrenergic receptors, producing pronounced vasoconstriction.

Indications: For post-resuscitation hypotension with normal heart rate

Contraindications: Hypersensitivity, severe hypertension, V-Tach

Side effects: bradycardia, headache, restlessness, rebound miosis, blurred vision

Dosage: Phenylephrine 100 - 180 mcg loading dose followed by infusion 40 – 60 mcg/min.

How supplied: 10 mg/ml, (check with your pharmacy.)

Vecuronium (vh-kyour-OH-nee-um)

Trade name: Norcuron

Class: Nondepolarizing neuromuscular blocking agent

Mechanism of action: Competes for cholinergic receptors at the motor end-plates

Indications: considered with on-line medical consultation for continued paralysis

Contraindications: Hypersensitivity,

Caution with: Hepatic disease, impaired acid-base, severe obesity, adrenal or neuromuscular disease, malignant hyperthermia

Side effects: Skeletal muscle weakness, respiratory depression, Malignant hyperthermia

Interactions: General anesthetic increase neuromuscular blockade and duration of action. Diuretics, Lithium, Narcotic, Succinylcholine, Phenytoin.

Diuretics may increase or decrease neuromuscular blockade. Lithium prolongs duration of neuromuscular blockade. Narcotic analgesics increase possibility of additive respiratory depression. Succinylcholine increases onset and depth of neuromuscular blockade. Phenytoin may cause resistance to or reversal of neuromuscular blockade.

Dosage: 0.1 mg/kg IVP

How supplied: 10 mg & 20 mg vials of microscopic crystalline particles.

Rocuronium

Trade name: Zemuron

Class: Nondepolarizing neuromuscular blocking agent

Mechanism of action: Competes for cholinergic receptors at the motor end-plates

Indications: Considered with on-line medical consultation for continued paralysis

Contraindications: Hypersensitivity,

Caution with: hepatic disease, impaired acid-base, severe obesity, adrenal or neuromuscular disease, malignant hyperthermia

Side effects: arrhythmias, tachycardia, vomiting, hiccups,

Interactions: There are no controlled studies documenting the use of rocuronium before or after other nondepolarizing muscle relaxants. Interactions have been observed when other nondepolarizing muscle relaxants have been administered in succession.*

*If ZEMURON® is administered following administration of succinylcholine, it should not be given until recovery from succinylcholine has been observed. There are no controlled studies documenting the use of ZEMURON® before or after other nondepolarizing muscle relaxants. Interactions have been observed when other nondepolarizing muscle relaxants have been administered in succession.

Dosage: 1 mg/kg IVP may be considered with on-line medical consultation for continued paralysis. Consider wrist restraints.

How supplied: 10mg/ml

Ondansetron

Trade name: Zofran

Class: selective antagonist of the serotonin receptor subtype, 5-HT₃.

Mechanism of action: is not known, probably due to the selective antagonism of 5-HT₃ receptors on neurons located in either the peripheral or central nervous

Indications: systems or both
Nausea/vomiting associated with chemotherapy & radiotherapy

Contraindications: Hypersensitive

Caution with: is not effective in preventing motion-induced nausea and vomiting

Side effects: headache, constipation, dizziness, musculoskeletal pain, drowsiness, fatigue, urinary retention, chest pain (rarely)

Dosage: 4 mg IV

How supplied: 2 mg/ml vials